AMERICAM CONSOLIDATED
MINING CO.

MINIMING AND RECLAMATION
PLAN

M/045/019 MAY 1988

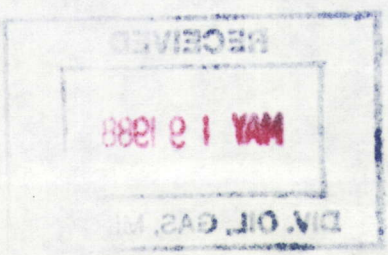
MINING AND RECLAMATION PLAN
ENVIRONMENTAL STUDY REPORT

Prepared For

State of Utah
Office of Natural Resources
Attn Mr. Holland Shepherd

Prepared By

American Consolidated Mining Co.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DIV. OIL GAS, MI

FORM MR-MO
(Revised 7/87)

FOR DIVISION USE ONLY
File #: M /045 / 019
Date Received: / /
Date Approved: / /
DOGM Lead:

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
Telephone: (801) 538-5340

NOTICE OF INTENTION TO COMMENCE MINING OPERATIONS MINING AND RECLAMATION PLAN

Based on Provisions of the Mined Land Reclamation Act, Title 40-8, Utah Code Annotated 1953, General Rules and Regulations and Rules of Practice and Procedures, By Order of the Board of Oil, Gas and Mining.

This form applies only to mining operations which disturb or will disturb greater than five acres at any given time.

"MINING OPERATIONS" means those activities conducted on the surface of the land for the exploration for, development of, or extraction of a mineral deposit, including, but not limited to, surface mining and the surface effects of underground and in situ mining, on-site transportation, concentrating, milling, evaporation, and other primary processing.

"Mining operation" does not include: the extraction of sand, gravel, and rock aggregate; the extraction of oil and gas as defined in Chapter 6, Title 40; the extraction of geothermal steam; smelting or refining operations; off-site operations and transportation; or reconnaissance activities which will not cause significant surface resource disturbance or involve the use of mechanized earth-moving equipment such as bulldozers or backhoes.

PLEASE NOTE: If extra space is required to complete a section, please attach additional sheets and include cross-referenced page numbers as necessary. The operator may submit this information on an alternate form, however the same or similar format must be used.

FORM MR-MO
(Revised 7/87)

I. GENERAL INFORMATION (Rule R613-005-104)

1. Mine Name: Yellow Hammer Mine

2. Mineral(s) to be Mined: Au, Ag, Cu, WO_3

3. Name of Applicant or Company: American Consoidated Mining Co.
Corporation (X) Partnership ( ) Individual ( )

4. Permanent Address: 405 South 100 East, Suite 201
Pleasant Grove, Utah 84062

5. Company Representative (or designated operator):
Name: American Consolidated Mining company
Title:
Address: 405 South 100 East, Suite 201 Pleasant Grove, Ut 84062
Phone: 801-785-7536

6. Location of Operation:
County(ies) Tooele
Township: 8 S. Range: 18W Section: 24
Township: _____ Range: _____ Section: _____
Township: _____ Range: _____ Section: _____

7. Ownership of the land surface: Private (Fee), Public Domain (BLM), National Forest (USFS), State of Utah or other:

Name: private- #4382 Address: _____
Name: owned by American Address: _____
Name: Consolidated Mining Address: _____
Name: _____ Address: _____

8. Owner(s) of record of the minerals to be mined:

Name: American Con. Min Address: 405 S. 100 E. Ste. 201, P.G., UT 84062
Name: _____ Address: _____
Name: _____ Address: _____
Name: _____ Address: _____

9. Have the above owners been notified in writing? Yes X No ____.
If no, why not? _____

10. Does the operator have legal right to enter and conduct mining operations on the land covered by this notice? Yes X No ____.

II. MAPS (Rule R613-005-105)

1. Base Map

A true and correct topographic base map (or maps) with appropriate contour intervals must be submitted with this Notice which show all of the items on the following checklist. The scale should be approximately 1 inch = 2,000 feet (preferably a USGS 7.5 minute series or equivalent topographic map where available) showing the location of lands to be affected in sufficient detail to permit calculation of proposed surface disturbance.

Note: 2 U.S.G.S. Maps Enclosed

Map Checklist

Please check off each section as it is drawn on the map(s). Does the map show:

(a) Property boundaries of surface ownership of all lands which are to be affected by the mining operations; See Claim Map check N.W. part of section 24

(b) Perennial streams, springs and other bodies of water, roads, buildings, landing strips, electrical transmission lines, water wells, oil and gas pipelines, existing wells or boreholes, or other existing surface or subsurface facilities within 500 feet of the proposed mining operations; X

(c) Proposed route of access to the mining operations from nearest publicity maintained highway (Map scale appropriate to show access); X

(d) Known areas which have been previously impacted by mining or exploration activities within the proposed mining permit area. X

(e) Acreages proposed to be disturbed or reclaimed each year (or other suitable time period See Claim Map See also below (D) See Sketch Map X

2. Surface Facilities Map

A surface facilities map shall be provided at a scale of not less than 1" = 500'.

Use Sketch Map

(D) Area has been mined by Cecil Woodman (Gold Hill) and also by his father before him - Since 1911, As well as many other companies.

Map Checklist

Please check off each section as it is drawn on the map. Does the map show:

(a) Proposed surface facilities, including but not limited to buildings, stationary mining/processing equipment, roads, utilities, power lines, proposed drainage control structures, and the location of topsoil storage areas, overburden/waste dumps, tailings or processed waste facilities, disposal areas for overburden, solid and liquid wastes, and wastewater discharge, treatment and containment facilities; See Sketch Map X

(b) A border clearly outlining the extent of the surface disturbed area proposed to be affected by mining, and the number of acres proposed to be affected; See Sketch Map X

(c) The location of known test borings,pits, or core holes. X

3. Additional Maps See Sketch Map
See also Claim Map

Additional maps and drawings may be required as applicable in accordance with Rule R613-005-105.3. N/A

III. OPERATION PLAN (Rule R613-005-106)

1. Acreage to be disturbed:

Minesite (operating, storage, disposal areas, etc.): 9
Access/haul roads/conveyors:
Associated on-site processing facilities:
Total: 9 Acres

2. Describe methods and procedures to be employed for mining, on-site processing and concurrent reclamation.

Open pit mining: Drill, blast and load. Overburden will be placed on the existing pad area. Ore will be stock piled and then shipped off site for processing.

3. Depth to groundwater (if known) _____ ft.

No water incountered at at 400' by core drilling

4. Thickness of soil material to be stockpiled. N/A inches
   Area from which soil material can be salvaged 0 acres
   Volume of soil to be stockpiled 0 cu. yds.
   (cross reference with item IV-17)

5. This is an old mine site with no stock piled top soil
   Thickness of overburden None ft.

6. Thickness of mineral deposit. 1000+ ft. Estimate

7. Volume of refuse, tailings, and processing waste stockpiles. 10,000 cu. yds.

8. Acreage of tailings ponds and water storage ponds to be constructed. N/A acres

9. Describe how topsoil or subsoil material will be removed, stockpiled and protected. N/A, See Section I

10. Describe how overburden material will be removed and stockpiled.
    Drill, blast and move with front end loader.

11. Describe how tailings, waste rock, rejected materials, etc. will be disposed of. Overburden will be placed on existing pad area.

12. Potentially toxic materials must be analyzed for toxicity. Describe the nature of any toxic materials which will be used, encountered, or generated onsite (See Rule R613-001-123).
    No toxic materials are known to exist.
    Specify analyses to be conducted on these materials.

    NOTE: The Division may stipulate additional analyses.

13. For each tailings pond, sediment pond, or other major drainage control structures, attach design drawings and typical cross-sections.

N/A

14. Describe any proposed effluent discharge points (NPDES) and show their location on the map provided under Rule R618-005-105.2. Give the proposed discharge rate and expected water quality. Attach chemical analyses of such discharge if available N/A

15. Vegetation - The operator is required to return the land to a useful condition and reestablish at least 70 percent of the premining vegetation ground cover (as measured on site before mining or on similar adjacent areas if already mined).

The ground cover percentage figure is determined by sampling and averaging the vegetation type(s) on the areas to be mined (see attachment I for sampling methods).

(a) Vegetation Survey The following information needs to be completed based upon the vegetation survey:

Sampling method used Ocular by DOGM representative

Number of plots or transects N/A

Ground Cover	Percent
Vegetation (perennial grass, forb and shrub cover)	20
Litter	10
Rock/rock fragments	30
Bare ground	40
	100%
Revegetation Requirement - 70 percent of above vegetation figure)	14 %

List the four (4) predominant perennial species of vegetation growing on the area.

Indian Ricegrass — Utah Juniper

Big Sage — Pinyon Pine

(b) Photographs - The operator may submit photographs (prints) of the site sufficient to show existing vegetation conditions. These photographs should show the general appearance and condition of the area to be affected and may be utilized for comparison upon reclamation of the site. Photographs should be clearly marked as to the location, orientation and the date that the pictures were taken. Mine Photos Enclosed

16. Soils - The plan shall include an order 3 Soil Survey (or similar) and map. This information is needed to determine which soils are suitable for stockpiling for revegetation. This soil data may be available from the local Soil Conservation Service office, or if on public lands, from the land management agency. The map needs to be of such scale that soil types can be accurately determined on the ground (see attachment I). • See Section I

(a) Each soil type to be disturbed needs to be field analyzed for the following:

Depth of soil material	_____ inches
Volume (for stockpiling)	_____ cu. yds.
Texture (field determination)	_____
pH (field determination)	_____
(cross reference with item IV - 5)	

(b) Where there are problem soil areas (as determined from the field examination) laboratory analysis may be necessary for some or all of the following parameters:

Electrical Conductivity	_____
Sodium Adsorption Ratio	_____
Saturation %	_____
Organic matter percentage	_____
Available P	_____
Available $N\text{-}NO_3$	_____
pH (laboratory)	_____
Texture (laboratory)	_____

NOTE: Soil samples to be sent to the laboratory for analysis need to be about one pint in size, properly labeled, and in plastic bags. Each of the soil horizons on some sites may need to be sampled.

17. Provide a narrative description of the geology of the area and/or a geologic cross section. • See Mine Report Attached

IV. IMPACT ASSESSMENT (Rule R613-005-108)

Please provide a general narrative description identifying potential surface and/or subsurface impacts. Where applicable, this description should include surface and groundwater systems, species of high interest or their critical habitats, existing soil resources for reclamation, slope stability, erosion control, air quality, and public health and safety.

This site is an old mine area. Additional mining will have minimal environmental impact. Reclamation after conclusion of will eliminate the existing safety hazards and return the land to use for wildlife grazing.

V. RECLAMATION PLAN (Rule R613-005-109)

1. List current land use(s) other than mining: Wildlife Habitat possible livestock grazing

2. List future post-reclamation land-use(s) proposed: Wildlife Habitat possible livestock grazing

3. Describe each phase of reclamation of the minesite in detail under the following categories:

(a) Disposal of Trash
Describe how building, foundations, trash and other waste materials will be disposed of. Buried on site or hauled to sanitary landfill.

(b) Backfilling and Grading
Describe equipment and methods to be employed, amount of materials to be moved and final disposition of any stockpiled materials. All overburden on top of the pad area and any remaining ~~stockpiles~~ will be regraded to a rounded configuration with slopes of 2H/1V or less. The pit highwall will be reduced to 45 degrees or less by backfilling and/or blasting.

(c) Soil Material Replacement
In order to reestablish the required ground cover, one to two feet (depending on underlying material) of suitable soil material usually has to be redistributed on the areas to be reseeded. If the stockpiled soil isn't sufficient for this, soil borrow areas will need to be located.

How much soil material is planned to be put on the area to be reseeded? See Section I 0 inches

Where will this material come from? The existing pad material will be used as a soil substitute

How will it be transported and spread? N/A

(d) Seed Bed Preparation

Describe how the seedbed will be prepared and equipment to be used. The seedbed will be ripped by a dozer to a depth of six inches

(The Division recommends ripping or discing six inches deep)

(e) Seed Mixture - List the species to be seeded:

Species Name	Seeding Rate (lbs Pure Live Seed/Acre)
Indian Ricegrass	2
Rabbit Brush	2
Crested Wheatgrass	4
Shadescale	6
Fourwing Saltbush	6

(The Division recommends seeding 20 lbs./acre of native and introduced adaptable species of grass, forb, and browse seed and will provide a specific species list if requested)

(f) Seeding Method

Describe method of planting the seed. Broadcast seed and rake seed into the soil.

(The Division recommends planting the seed with a rangeland or farm drill, or if broadcast seeded, harrow or rake the seed 1/4 to 1/2 inch into the soil. Fall is the preferred time to seed)

(g) Fertilization

Describe fertilization method and rate. Diammonium Phosphate 18-46-0 100 lbs/acre

(The Division recommends broadcast fertilization at the time of seeding of 200 lbs./acre of diammonium phosphate 18-46-0)

(h) Other Revegetation Procedures

If other reclamation procedures, such as mulching, irrigation, etc., are planned, describe them. hay or alfalfa mulch 2,000 lb/acre

VI. VARIANCE (Rule R613-005-111):

Any planned deviations from rule R613-005-007 (Operating Practices) or Rule R613-005-010 (Reclamation Practices) must be identified below.

Rule Number	Title/Category
M - 10 (12)	Revegetation
M - 10 (14)	Topsoil

For each variance requested, attach a narrative statement describing and delineating the area proposed to be affected by the variance, justifying the need for the variance, and discussing alternate methods or measures to be utilized.

VII. SURETY (Rule R613-005-112)

A Reclamation surety must be provided to the Division prior to final approval of this application. In calculating this amount, the Division will consider the following major steps:

1) Clean-up and removal of structures.
2) Backfilling, grading and contouring.
3) Soil material redistribution and stabilization.
4) Revegetation (preparation, seeding, mulching)
5) Safety and fencing.
6) Monitoring.

See Attached

To assist the Division in determining a reasonable surety amount, please attach a reclamation cost estimate which addresses each of the above steps.

VIII. SIGNATURE REQUIREMENT

I hereby certify that the foregoing is true and correct.

Signature of Operator: American Consolidated Mining by.

Name (typed or print): ~~William Moeller, Chairman~~

Title of Operator: Owner

Date: 5/5/88

PLEASE NOTE:

Section 40-8-13(2) of the Mined Land Reclamation Act provides for maintenance of confidentiality concerning certain portions of this report. Please check to see that any information desired to be held confidential is so labeled and included on separate sheets or maps. Only information relating to the location, size or nature of the deposit may be protected as confidential.

Confidential Information Enclosed: (X) Yes ( ) No
Claim Map

VII. SURETY (Rule R613-004-113)

A Reclamation surety must be provided to the Division prior to final approval of this application. In calculating this amount, the Division will consider the following major steps:

1) Clean-up and removal of structures.
2) Backfilling, grading and contouring.
3) Soil material redistribution and stabilization.
4) Revegetation (preparation, seeding, mulching)
5) Safety and fencing.
6) Monitoring.

} See Attached

To assist the Division in determining a reasonable surety amount, please attach a reclamation cost estimate which addresses each of the above steps.

VIII. SIGNATURE REQUIREMENT

I hereby certify that the foregoing is true and correct.

Signature of Operator: William D Moeller Chairman

Name (typed or print): William D Moeller

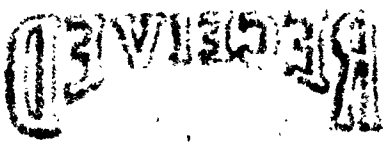
Title of Operator: C.E.O.

Date: May 26, 1988

PLEASE NOTE:

Section 40-8-13(2) of the Mined Land Reclamation Act provides for maintenance of confidentiality concerning certain portions of this report. Please check to see that any information desired to be held confidential is so labeled and included on separate sheets or maps. Only information relating to the location, size or nature of the deposit may be protected as confidential.

Confidential Information Enclosed: ( ) Yes (X) No



SECTION I

Rule M-10(12), Revegetation Variance Narrative

The Yellow Hammer Pit was developed prior to the Mined Land Reclamation Act and no topsoil was stockpiled. The mine area had virtually no vegetative cover when the mine was reopened in * 198_. American Consolidated will seed the entire mine area excluding the pad outslopes and will reseed any areas which show poor initial growth. We believe however, that obtaining 70 percent of the vegetative ground cover of adjacent areas is not practical.

RULE M-10(14), Soil Variance Narrative

As described under Revegetation Variance Narrative, no topsoil material has been saved and stockpiled at the site due to prelaw disturbance. No topsoil will be barrowed from adjacent areas to reclaim the existing disturbance. If any new disturbance is made to yet undisturbed areas, at this site, topsoil will be removed prior to the disturbance, stockpiled and protected.

Because of the lack of topsoil, the planting medium will be ripped fertilized and mulched (hay) at final reclamation.

SURETY ESTIMATE

I	Removal of shed and fuel tank.	$ 500.00
II	Backfilling, grading, and contouring	$10,000.00
III	Ripping and seeding	$ 3,000.00
	SUBTOTAL.	$13,500.00
IV	10% Contingency	1,350.00
	TOTAL in 1988 Dollars. . .	$14,850.00
V	Inflation - 5 year Bond Period 2.3 % per year. . .	1,150.00
	TOTAL (1993 $)	$16,600.00

REPORTING FORM FOR CRIB MINERAL RESOURCES COMPUTER FILE

RECORD IDENTIFICATION:

Record No. B10 < D,C,1,5,1,9,6 > U (circle U if form used for update and fill in labels G3 and G4)

Record Type B20 < X >

Information Source B30 < 1,3 > (other)

Deposit No. B40 < 45-CLIFTON-6 >

File Link ID B50 < BLM >

REPORTER: (Enter G1, G2 if new form; G3, G4 if update) (USGS)

G1 < 7,8 (Yr) 0,8 (Mo) > G2 < Wong, George , Tooker, Ed >

UPDATE: G3 < 8,1 (Yr) 0,9 (Mo) > By: G4 < Dorling (Last name) , Hellmut H. (first initial) >

NAME:

Deposit Name A10 < YELLOW HAMMER MINE >

Synonym Name(s) A11 < Cosmopolitan >

LOCATION:

Mining District/Area/Subdist. A30 < CLIFTON District >

Country A40 < U,S > (U,S) (enter code TWICE from list C)

State A50 < 49 > (4,9) (enter code twice from list D if in US)

County A60 < TOOELE >

Position from nearest prominent locality A82 < 11,500 feet North 75° East of Skinner Spring >

GIVE 1 OR MORE OF THE 4 LOCATIONS PRESENTED BELOW:

UTM Northing A120 < 4,4,4,4,3,8,0,.,0 >

UTM Easting A130 < 2,5,9,1,0,0,.,0 >

UTM Zone No. A110 < +,1,2 >

Latitude A70 < D D - M M - S S N/S >

Longitude A80 < D D D - M M - S S E/W >

State X Coord. A71 < >

State Y Coord. A72 < >

State Zone No. A73 < >

Township(s) A77 < 0,8,S >

Range(s) A78 < 0,8,W >

Section(s) A79 < 24 >

Meridian(s) A81 < SALT LAKE >

Altitude A107 < 6285 FT >

Quad Scale A100 < ,2,4,0,0,0 >

Land Classification A64 < 4,9 > (LIST P)

Quad No. or Name A90 < CLIFTON >

Drainage Area (list J) A62 < 1,6 | Great Salt Lake Desert >

Physiographic Province (list K) A63 < 1,2 | Deep Creek Mtns. >

Location Comments A83 < Section Subdivisions SW 1/4 SE 1/4 NW 1/4 >

CRIB FORM 12 (12-78)

COMMODITY INFORMATION

Commodities Present C10 <AU, CU, AG, W, MO, BE>

Main Commodities Present C11 <W, AG, AU, CU> Commodity Specialist Information

Minor Commodities Present C12 <MO, BE> C20 <>

Significance — Major Products MAJOR <W> (code from list E)

Minor Products MINOR <>

Coproducts COPROD <> Potential Products POTEN <MO, AG, AU>

Byproducts BYPROD <> Occurrences OCCUR <BE, CU>

Main Ore Minerals C31 <Scheelite, copper pitch, maladcite, chalcopyrite>

Minor Ore Minerals C32 <chrysocolla, molybdenite, powellite, native gold>

Commodity Subtypes or Use Categories C41 <>

Commodity Comments C50 <perhaps some cuprite present>

ANALYTICAL DATA

Reference C44 <CUSTER, 1917, see also Flint, 1960>

BTU's BTU <> Volatiles C45 <> %

Sulfur SUL <> % Moisture C46 <> %

Ash ASH <> % Thickness of Coal C47 <> (FT or M).

Fixed Carbon CARB <> %

Analytical Data (General) C43 <Samples yielded 0.4-0.62 oz/ton gold, 1.4-3.8 oz/ton silver and 1.36-1.68 percent copper.>

MINERAL ECONOMICS FACTORS

Exploration M$ C42A <> Mill M$ C42D <>

Development M$ C42B <> Total Investments M$ C42E <>

Expansion M$ C42C <> Mill Capacity Per Yr (thous. metric tons) C42F <> C42G <> (Yr appl)

Economic Comments C42 <>

EXPLORATION AND DEVELOPMENT

Status of Exploration or Development A20 <4> (code from list B)

Year of Discovery L10 <> By Whom L20 <>

Nature of Discovery L30 <B> (List L) Present or Last Owner A12 <>

Year of First Production L40 <> Present or Last Operator A13 <>

Work Done by USGS (earliest to present)

	Year	Type of work (List M)	Geologist and Results
1) L41	1935	GEOLMAP	Nolan, 1935, USGS, PP 177
2) L42			
3) L43			

Work Done by Other Organizations (earliest to present)

	Year	Type of work (List M)	Organization and Results
1) L50	1961	RECON	U.S. Bur. Mines IC 8014
2) L60	1970	MINEMAP	Univ. of Utah., UGMS Bull. 83.
3) L70			

Reports Available L1< Flint A., 1960, A report of the examination and evaluation of the Alvarado, Cane Spring, Bonnemort, and Yellow Hammer mines, Gold Hill mining district, Tooele Co. UT (unpublished) >

Comments L110< >

DESCRIPTION OF DEPOSIT

Deposit Type(s) (List F) C40< Fissures and replacements >

Deposit Form/Shape (List N) M10< Tabular >

		(units)			
Max Thickness	M60< >	M61< >	Size	M15< Small >
Depth to Top	M20< 0 >	M21< Ft >	Strike	M70< N 65 E >
Depth to Bottom	M30< >	M31< >	Dip	M80< 65. SE >
Max Length	M40< 25 >	M41< Ft. >	Plunge	M90< >
Max Width	M50< 5 >	M51< Ft >	Plunge dir.	M100< >

Property is: (Active) A21 (Inactive) (A22) (Circle One)

Comments M110< Several small deposits, wall-rock contacts not sharp >

DESCRIPTION OF WORKINGS

Workings are: (Surface) M120 (Underground) M130 (Both) (M140) (Circle Appropriate Labels)

For Underground Workings: (units)

Depth Below Surface	M160< >	M161< >
Length of Workings	M170< >	M171< >

For Surface Workings (or underground rooms): (units)

Overall Length of Mined Area	M190< >	M191< >
Overall Width of Mined Area	M200< >	M201< >
Overall Area	M210< >	M211< >

Comments M220< Several large open pits have broken into older underground workings, probably 635 ft of underground workings remain. >

GENERAL REFERENCES

1) F1< Nolan, T.B., 1935, The Gold Hill Mining District, Utah: USGS PP177 >

2) F2< El-Shatoury, H.M. and Whelan, J.A., 1970, Mineralization in the Gold Hill Mining district Tooele Co, Utah: UGMS Bull. 83 >

3) F3< Everett, F.D., 1961, Tungsten Deposits in Utah: Bureau of Mines Information Circular 8014 >

4) F4< Custer, A.E, 1917, Deep Creek, Clifton Mining District, Utah: Eng. and Min. Jour., v. 103, p. 916. >

GEOLOGY AND MINERALO

Age of Host Rocks K1< J,U,R >

Host Rock Types K1A< Granodiorite >

Age of Assoc. Igneous Rocks K2< J,U,R >

Igneous Rock Types K2A< Granodiorite >

Age of Mineralization K3< >

Pertinent Mineralogy Other than Ore Minerals K4< Actinolite, quartz, calcite, orthoclase, Tourmaline, albite, apatite, chlorite, muscorite, sericite, garnet, perthite>

Important Ore Control or Locus K5< major fractures >

Major Regional Structures or Trends M5< BASIN AND RANGE >

Tectonic Setting M15< Geosyncline >

Significant Local Structures M70< >

Significant Alteration M75< >

Process of Concentration or Enrichment M80< Hydrothermal alteration >

	Age (List O)	Age, Names of Formations or Rock Types
M30<		LST >
M35<		LST >
M40<		LST >
M45<		LST >

	Age (List O)	Age, Names of Igneous Units or Rock Types
M50<	J,U,R	LST GOLD HILL STOCK >
M55<		LST >
M60<		LST >
M65<		LST >

Comments (Geology and Mineralogy) M85< K4 sphene, apatite, magnetite, limonite, jarosite, hematite >

GENERAL COMMENTS GEN< >

CRIB FORM 10(5-76)

Attachment I

Vegetation Cover Sampling

Vegetation cover sampling determines the amount of ground that is covered by live vegetation. It is divided into four categories which equal 100 percent. They are:

Vegetation - This is the live perennial vegetation. Care should be taken to avoid sampling in disturbed areas that have a large percentage of annual or weedy vegetation, such as cheatgrass and russian thistle.

Litter - This is the dead vegetation on the ground, such as leaf and stem litter.

Rock/rock fragments - This is the rock and rock fragments on the soil surface.

Bare ground - This is the bare soil which is exposed to wind and water erosion.

Cover Sampling - The following methods are acceptable:

Ocular Estimation

This method visually estimates the percentage of ground covered in a plot by the four components. Plot size is usually a meter or yard square or a circular plot 36 inches in diameter. Ten to 20 plots should be randomly sampled in each major vegetation type.

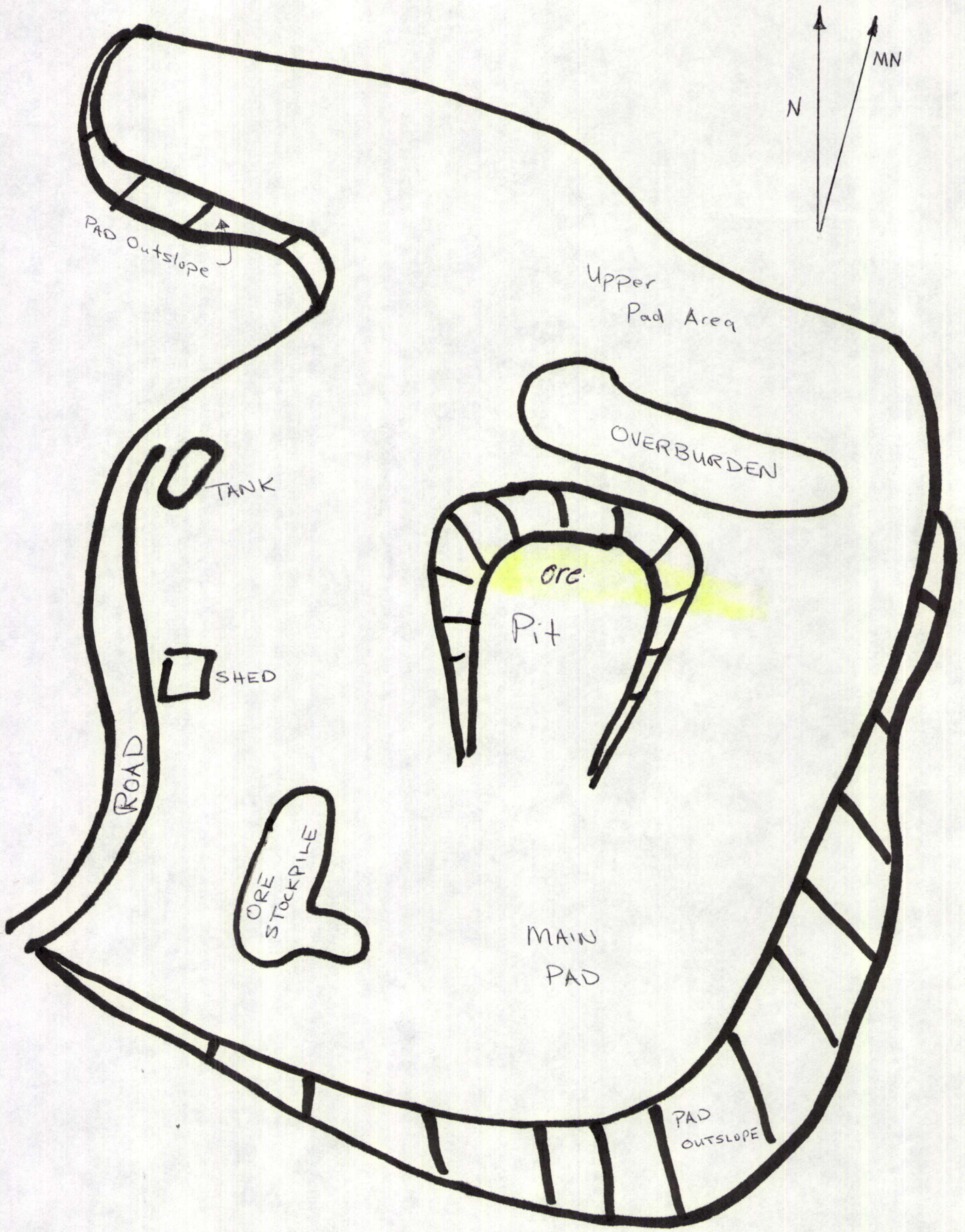
Line Intercept

Percent ground cover is obtained by stretching a tape measure (usually 100') over the ground and then recording which of the four components is under each foot mark. At least two of these transects should be randomly laid out and measured in each major vegetation type.

Soil Survey and Sampling Methods

If a SCS or land management agency soil survey is not available, the operator shall delineate all soil types that will be disturbed by mining on a map. Each soil type shall be sampled for its characteristics and inherent properties. Representative sampling locations should have similar geologic parent material, slopes, vegetative communities and aspects. The sampling locations should be representative of the soil type and be identified on the map. Sampling shall be at a minimum of one (1) for each soil type disturbed.

The soil map needs to be of sufficient scale so that each soil type can be accurately located on the ground.



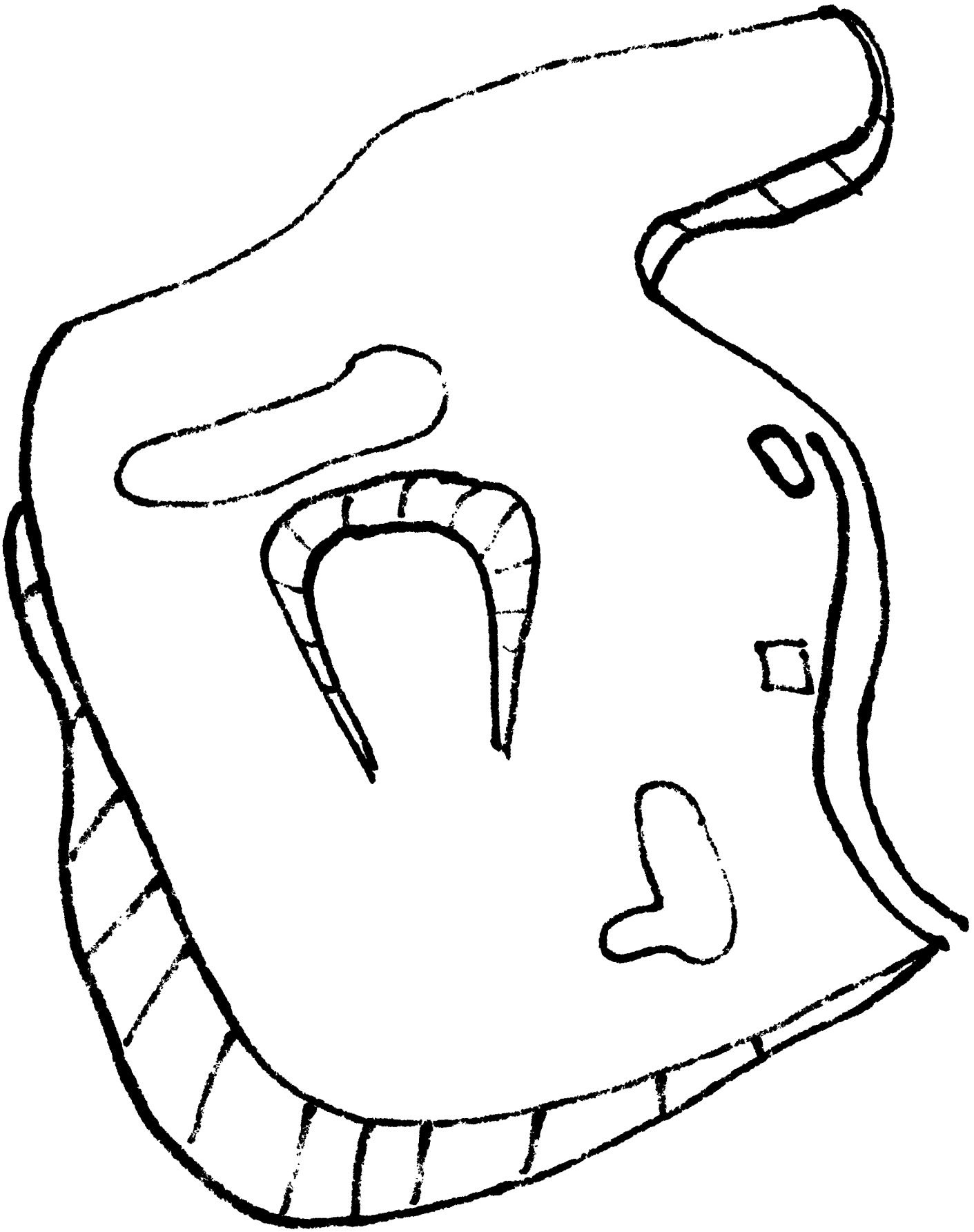
YELLOW HAMMER MINE

SKETCH MAP, 1" = 100'

Surface Area = 9 Acres (excluding outslopes)

PREPARED BY FRANK FILAS

4-7-88



Canyon
Gulch
BM 4868
Hill
Gold
BM 5011
Rube Mine
Mine
Alvarado Mines
BM 5235
Gold Hill
BM 5405
Mines
Gold Hill
BM 5148
U.S Mine
Mine
BM 5109
Wash
Lucy
Mines
Lucky Day Knob
Mine
Prospect
Wash
Rodenhouse
USLM
USLM
36
32
12
13
16
R 18 W | 260 (CLIFTON) R 17 W
3264 III SE
50′
259
261
47′30″
263
INTERIOR—GEOLOGICAL SURVEY,
SCALE 1:24 000
1 MILE
7000 FEET
1 KILOMETER
CONTOUR INTERVAL 40 FEET
DOTTED LINES REPRESENT 20-FOOT CONTOURS
UTAH
ROAD CLASSIFICA
Primary highway, hard surface
Secondary highway, hard surface
Interstate Route
U. S. Ro
Light-
improv
Unimp

R18W

R18W

R18W

UTAH
(TOOELE COUNTY)
GOLD HILL QUADRANGLE
1370000 FEET
113°45'
40°15'

GREAT SALT LAKE DESERT

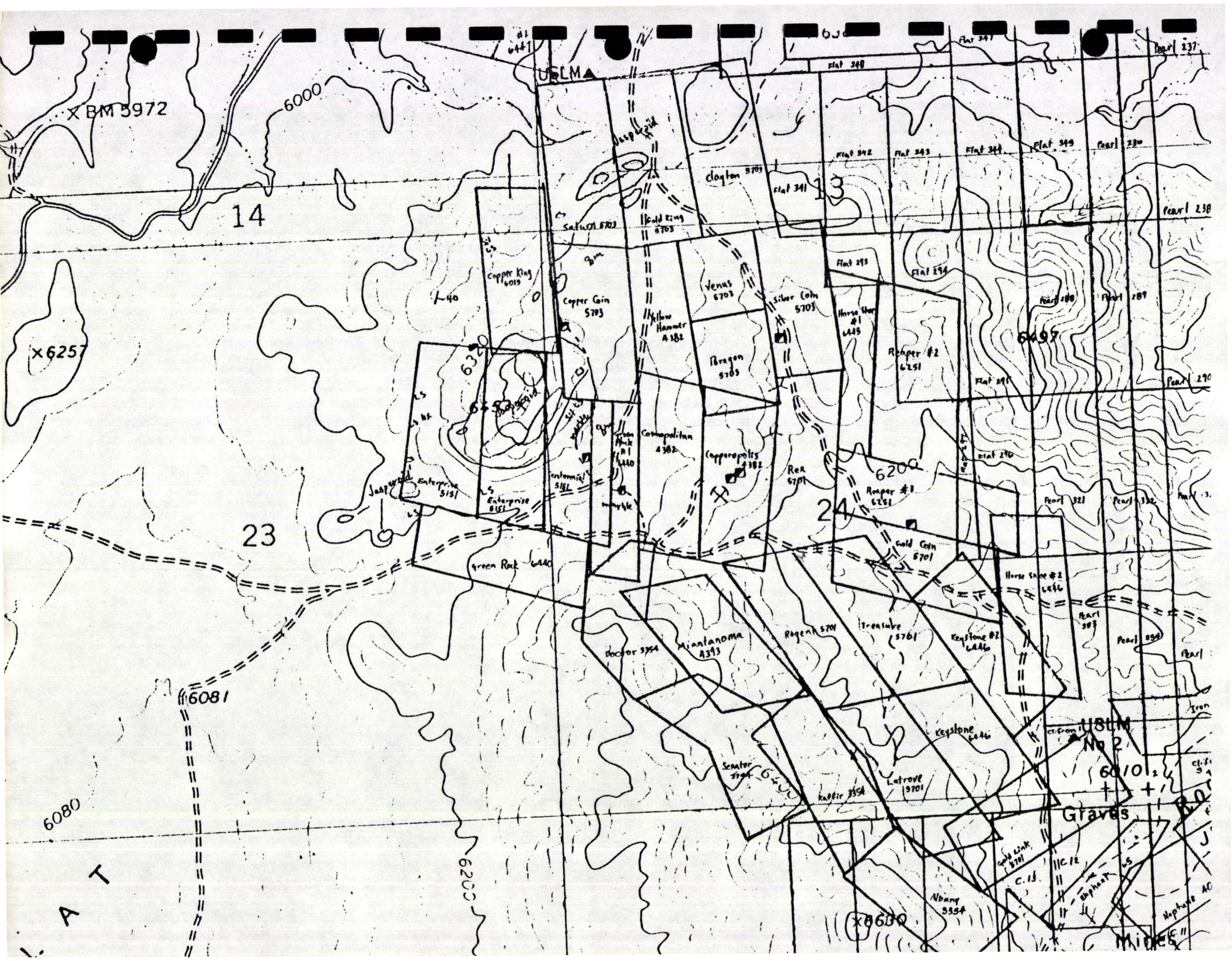
700000 FEET

T7S

T8S

CALLAO 12 MI.
TROUT CREEK 28 MI.

T. 9 S.


USLM
XBM 5972
6000
14
13
23
24
Jasperoid
Clayton 5703
Flat 341
Flat 342
Flat 343
Flat 344
Flat 345
Pearl 237
Pearl 238
Pearl 239
Pearl 290
Flat 348
Flat 347
Gold King 5703
Copper King 6019
Copper Coin 5703
Venus 5703
Silver Coin 5703
Willow Hammer A382
Oregon 5703
Horse Shoe #1 6445
Reaper #2 6251
Flat 293
Flat 294
Flat 291
Flat 290
6497
6320
6200
Cosmopolitan A382
Copperopolis A382
Rex 5701
Reaper #3 6251
Gold Coin 5701
Horse Shoe #2 6446
Keystone #2 6446
Pearl 321
Pearl 332
Pearl 383
Pearl 384
Green Rock 6440
Enterprise 5151
Centennial 5151
Jasperoid
marble
Doctor 3354
Montanoma A393
Regent 5701
Treasure 5761
Keystone 6446
Senator 3354
Kaffir 3354
Latrove 5701
USLM No 2
6010
Graves
Gold Link 5701
C.13
C.12
Elephant
Neptune
Nbany 3354
6080
6081
6200
6600
Miles